

APPENDIX IV

LAND USE/LAND COVER	AREA IN HUC-10 SUBWATERSHEDS (ACRES)			
	01	03	04	05
Bare Rock/Sand/Clay	40	10	310	116
Deciduous Forest	30,260	18,753	32,962	12,688
Emergent Herbaceous Wetlands	16	54	67	29
Evergreen Forest	12,715	6,083	13,267	4,086
High Intensity: Commercial/Industrial/Transportation	32	35	1,107	1,391
High Intensity: Residential	2	5	106	663
Low Intensity: Residential	121	114	3,186	4,764
Mixed Forest	14,448	5,693	13,214	4,287
Open Water	6	4,877	1,590	155
Other Grasses: Urban/Recreational	87	14	1,260	1,215
Pasture/Hay	5,041	436	20,483	5,304
Row Crops	1,051	200	3,120	886
Transitional	267		72	
Woody Wetlands	49	109	273	104
Total	64,134	36,382	91,087	35687

Table A4-1. Land Use Distribution in Group 2 Portion of Tennessee Portion of the South Fork Holston River Watershed by HUC-10. Data are from 1992 Multi-Resolution Land Characterization (MRLC) derived by applying a generalized Anderson Level II system to mosaics of Landsat thematic mapper images collected every five years.

HYDROLOGIC SOIL GROUPS
GROUP A SOILS have low runoff potential and high infiltration rates even when wet. They consist chiefly of sand and gravel and are well to excessively drained.
GROUP B SOILS have moderate infiltration rates when wet and consist chiefly of soils that are moderately deep to deep, moderately to well drained, and moderately coarse to coarse textures.
GROUP C SOILS have low infiltration rates when wet and consist chiefly of soils having a layer that impedes downward movement of water with moderately fine to fine texture.
GROUP D SOILS have high runoff potential, very low infiltration rates, and consist chiefly of clay soils.

Table A4-2. Hydrologic Soil Groups in Tennessee as Described in WCS.

STATION	HUC-10	AGENCY	NAME	AREA (SQ MILES)	LOW FLOW (CFS)		
					1Q10	7Q10	3Q20
363115082051101	0601010203	TVA					
0347700	0601010204	USGS	South Fork Holston River	813.0	120.0	139.0	101.0
03476515	0601010204	USGS	Beidleman Creek	27.4	3.75	4.10	3.00
363126082052601	0601010204	TVA					
03478500	0601010205	USGS					

Table A4-3. Historical Streamflow Data Summary Based on Mean Daily Flows in South Fork Holston River Watershed. USGS, United States Geological Survey; TVA, Tennessee Valley Authority.

PARAMETER	SUBWATERSHED			
	01	03	04	05
E. coli	A, E		\$, α, β, γ, δ	%, @, ■, ▲
Enterococcus	A, E		\$, α, β, γ, δ	%, @, ■, ▲
Fecal Coliform	A, E		\$, α, β, γ, δ	%, @, ■, ▲
Fecal Streptococcus				%, @, ■
Total Coliform				
Acidity				
Alkalinity (Total)	A, E		\$	%, @
BOD ₅				%, @
BOD-C	A, E		\$	%, @, ■
Color (Apparent)	A, E		\$	
Color (True)	A, E		\$	
Conductivity (Field)	A, E		\$, α, β, γ, δ	%, @, ■, ▲
COD (Low)			α, β, γ, δ	%, @, ■, ▲
Depth				
DO	A, E		\$, α, β, γ, δ	%, @, ■, ▲
Flow				%, @
Hardness (Total)	A, E		\$, α, β, γ, δ	%, @, ■, ▲
pH (Field)	A, E		\$, α, β, γ, δ	%, @, ■, ▲
pH (Lab)				
Residue (Dissolved)	A, E		\$, α, β, γ, δ	%, @, ■, ▲
Residue (Settlable)				%, @
Residue (Suspended)	A, E		\$, α, β, γ, δ	%, @, ■, ▲
Residue (Total)				%, @
Temperature	A, E		\$, α, β, γ, δ	%, @, ■, ▲
Turbidity	A, E		\$	
Biorecon			L, N	%, @
RBP III	A, B, E		L, N, \$	%, @
Ag				
Al				%, @
Ammonia N	A, E		\$, α, β, γ, δ	%, @, ■, ▲
As	A, E		\$, α, β, γ, δ	%, @, ■, ▲
Ca				
Cd	A, E		\$, α, β, γ, δ	%, @, ■, ▲
Cl ⁻	A, E			
CN ⁻	A, E			%, @
Cr (Hexavalent)				
Cr (Total)	A, E		\$, α, β, γ, δ	%, @, ■, ▲
Cu	A, E		\$, α, β, γ, δ	%, @, ■, ▲
Fe	A, E		\$	%, @
Hg	A, E		A, β, γ, δ	%, @, ■, ▲
Mn	A, E		\$	%, @
N (Total Kjeldahl)	A, E		\$, α, β, γ, δ	%, @, ■, ▲
Ni	A, E		α, β, γ, δ	%, @, ■, ▲
NO ₂ +NO ₃	A, E		\$, α, β, γ, δ	%, @, ■, ▲
P (Total)	A, E		\$, α, β, γ, δ	%, @, ■, ▲

Pb	A, E		\$, α, β, γ, δ	%, @, ■, ▲
Se				%, @
SO ₄	E			
TOC	A, E		\$	%, @, ■
Zn	A, E		\$, α, β, γ, δ	%, @, ■, ▲

Table A4-4a. Water Quality Parameters Monitored in the Group 2 Portion of the Tennessee Portion of the South Fork Holston River Watershed. Codes are described in Table A4-4b.

CODE	STATION	ALIAS	AGENCY	LOCATION
A	ECO66E04		TDEC	Gentry Creek @ RM 3.2
B	JWRIG001.1JO	ECO66F02	TDEC	Jim Wright Branch @ RM 1.2
C	03472510		USGS	Locust Knob Branch
D	03472515		USGS	UT to Locust Knob Branch
E	ECO66F07		TDEC	Beaverdam Creek
F	SFHOL050.0SU	SFHOLSTON050.0	TDEC	South Fork Holston River @ RM 50.0
G	SFHOL055.0SU	SFHOLSTON055.0	TDEC	South Fork Holston River @ RM 55.0
H	SFHOL057.8SU	SFHOLSTON057.8	TDEC	South Fork Holston River @ RM 57.8
I	SFHOL060.3SU	002540	TDEC	South Fork Holston River @ RM 60.3
J	SFHOL062.7SU	SFKHOLSTON62.7	TDEC	South Fork Holston River @ RM 62.7
K	BEIDL001.3SU		TDEC	Beidleman Creek @ RM 1.3
L	HATCH000.2SU		TDEC	Hatcher Creek @ RM 0.2
M	INDIA001.3SU		TDEC	Indian Creek @ RM 1.3
N	MUDDY000.7SU		TDEC	Muddy Creek @ RM 0.7
O	475527		TVA	South Fork Holston Dam Scroll Case
P	476221		TVA	Boone Reservoir
Q	476494		TVA	South Fork Holston Dam Tail Race
R	476527		TVA	Davis Boat Dock
S	477452		TVA	South Fork Holston Dam Sluice
T	477588		TVA	Boone Reservoir Boat Ramp
U	477590		TVA	Boone Reservoir Private Beach
V	477600		TVA	Below Bristol WTP
W	477601		TVA	South Fork Holston River @Thomas Creek
X	477602		TVA	South Fork Holston River
Y	477603		TVA	South Fork Holston River
Z	477604		TVA	
#	477605		TVA	
\$	ECO6707		TDEC	Possum Creek
α	SFHOL028.2SU	SFKHOLSTON028.2	TDEC	South Fork Holston River @ RM 28.2
β	SFHOL030.8SU	SFKHOLSTON030.8	TDEC	South Fork Holston River @ RM 30.8
γ	SFHOL033.0SU	SFKHOLSTON033.0	TDEC	South Fork Holston River @ RM 33.0
δ	SFHOL034.3SU	SFKHOLSTON034.3	TDEC	South Fork Holston River @ RM 34.3
&	STEEL011.0SU	002790	TDEC	Steele Creek @ RM 11.0
%	BACK000.5SU		TDEC	Back Creek @ RM 0.5
@	CEDAR000.3SU		TDEC	Cedar Creek @ RM 0.3
?	03478606		USGS	Unnamed Trib to White Top Creek
£	477645		TVA	Steele Creek @ Steele Creek Lake
♠	477646		TVA	Mill Creek @ Steele Creek lake
♣	477647		TVA	Steele Creek Lake (Upper Station)
♥	477648		TVA	Steele Creek lake (Middle Station)
♦	477649		TVA	Steele Creek Lake (Forebay Section)
♪	477650		TVA	Steele Creek Lake Discharge
■	BEAVE001.0SU	000225	TDEC	Beaver Creek @ RM 1.0
▲	BEAVE000.2SU		TDEC	Beaver Creek @ RM 0.2

Table A4-4b. Water Quality Monitoring Stations in the Group 2 Portion of the Tennessee Portion of the South Fork Holston River Watershed. TDEC, Tennessee Department of Environment and Conservation; USGS, United States Geologic Survey; TVA, Tennessee Valley Authority.

FACILITY NUMBER	FACILITY NAME	SIC	SIC NAME	MADI	WATERBODY	HUC-10
TN0023531	Bristol STP #2	4952	Sewerage Systems	Major	Boone Reservoir	0601010204
TN0075884	Bristol/Bluff City UD	4941	Water Supply	Minor	Boone Reservoir	0601010204
TN0064106	Unisys Corp.-Earhart Site	9999	Nonclassifiable Establishments	Minor	UT to Back Creek @ RM 1.4	0601010205
TN0067504	Maymead Materials, Inc.	2951	Asphalt Paving Mixtures/Blocks	Minor	UT to Back Creek @ RM 5.5	0601010205

Table A4-5. Active Permitted Point Source Facilities in the Group 2 Portion of the Tennessee Portion of the South Fork Holston River Watershed. SIC, Standard Industrial Classification; MADI, Major Discharge Indicator.

FACILITY NUMBER	PERMITEE	SIC	SIC NAME	WATERBODY	HUC-10
TN0064157	Bristol Quarry	1422	Crushed and Broken Limestone	Unnamed Trib to Back Creek	0601010205

Table A4-6. Active Permitted Mining Sites in the Group 2 Portion of the Tennessee portion of the South Fork Holston River Watershed. SIC, Standard Industrial Classification.

FACILITY NUMBER	FACILITY NAME	SECTOR	RECEIVING STREAM	AREA*	HUC-10
TNR051093	Mountain City Lumber	A	Drystone Branch	13.0	0601010201
TNR053382	Mountain City Hardwoods	A	Laurel Creek	13.0	0601010201
TNR050691	Eastman Aviation	S	Gannon Creek	8.5	0601010204
TNR051025	Specialty Chemical Co.	AD	UT to Woods Branch	3.0	0601010204
TNR051391	Microporous Products	Y	Booher Creek	4.0	0601010204
TNR053022	Bluff City Used Cars	M	UT to South Fork Holston	6.0	0601010204
TNR053171	Modern Forge Company	AA	UT to Booher Creek	7.0	0601010204
TNR053325	Thompson Metal Services	N	Booher Creek	6.0	0601010204
TNR053427	Federal Express	S	Ten Mile Creek	1.2	0601010204
TNR053496	Tri-Cities Regional Airport	S	Wagner Creek	1100.0	0601010204
TNR054020	Magneti Marelli	AB	UT to Gammon Creek	21.6	0601010204
TNR054084	General Shale Products	E	East Woods Branch, Booher Creek	37.0	0601010204
TNR055064	Kysor Panel Systems	AB	UT to Woods Branch	4.0	0601010204
TNR055953	Harris Trucking Company	P		2.7	0601010204
TNR050050	Blountville Auto Salvage	M	South Fork Holston River	29.0	0601010205
TNR050315	Davis Pipe	F	Evans Creek	64.0	0601010205
TNR050325	Seaman Corporation #1	V	Cedar Creek	9.0	0601010205
TNR050804	Tenn Investment Casting	F	Back Creek	3.0	0601010205
TNR050957	Hot Rod Auto Salvage	M	Back Creek	4.5	0601010205
TNR051385	Tri-City Auto Parts	M	Wet Weather Conveyance to Beaver Creek	50.0	0601010205
TNR051656	Exide Technologies Battery Plant	AC	Univac Branch	150.6	0601010205
TNR051901	Maymead Materials	D	Back Creek	5.0	0601010205
TNR052050	Overnight Transportation	P	Reedy Creek	12.5	0601010205
TNR053191	Simerly Concrete Products	Y	Cedar Creek	2.3	0601010205

Table A4-7. Active Permitted TMSP Facilities in the Group 2 Portion of the Tennessee Portion of the South Fork Holston River Watershed. Area, acres of property associated with industrial activity; WWC, Wet Weather Conveyance. Sector details may be found in Table A4-8.

SECTOR	TMSP SECTOR NAME
A	Timber Products Facilities
AA	Facilities That Manufacture Metal Products including Jewelry, Silverware and Plated Ware
AB	Facilities That Manufacture Transportation Equipment, Industrial or Commercial Machinery
AC	Facilities That Manufacture Electronic and Electrical Equipment and Components, Photographic and Optical Goods
AD	Facilities That Are Not Covered Under Sectors A Thru AC (Monitoring Required)
AE	Facilities That Are Not Covered Under Sectors A Thru AC (Monitoring Not Required)
B	Paper and Allied Products Manufacturing Facilities
C	Chemical and Allied Products Manufacturing Facilities
D	Asphalt Paving, Roofing Materials, and Lubricant Manufacturing Facilities
E	Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing Facilities
F	Primary Metals Facilities
G	Metal Mines (Ore Mining and Dressing) (RESERVED)
H	Inactive Coal Mines and Inactive Coal Mining-Related Facilities
I	Oil or Gas Extraction Facilities
J	Construction Sand and Gravel Mining and Processing and Dimension Stone Mining and Quarrying Facilities
K	Hazardous Waste Treatment Storage or Disposal Facilities
L	Landfills and Land Application Sites
M	Automobile Salvage Yards
N	Scrap Recycling and Waste and Recycling Facilities
O	Steam Electric Power Generating Facilities
P	Vehicle Maintenance or Equipment Cleaning areas at Motor Freight Transportation Facilities, Passenger Transportation Facilities, Petroleum Bulk Oil Stations and Terminals, the United States Postal Service, or Railroad Transportation Facilities
Q	Vehicle Maintenance Areas and Equipment Cleaning Areas of Water Transportation Facilities
R	Ship or Boat Building and Repair Yards
S	Vehicle Maintenance Areas, Equipment Cleaning Areas or From Airport Deicing Operations located at Air Transportation Facilities
T	Wastewater Treatment Works
U	Food and Kindred Products Facilities
V	Textile Mills, Apparel and other Fabric Product Manufacturing Facilities
W	Furniture and Fixture Manufacturing Facilities
X	Printing and Platemaking Facilities
Y	Rubber and Miscellaneous Plastic Product Manufacturing Facilities
Z	Leather Tanning and Finishing Facilities

Table A4-8. TMSP Sectors and Descriptions.

LOG NUMBER	COUNTY	DESCRIPTION	WATERBODY	HUC-10
99.340	Johnson	Earthen Dam	UT to Waters Branch	0601010201
97.549	Sullivan	Culvert, Stream Relocation	Burr Branch	0601010205
99.170	Sullivan	Box Culvert	Little Creek	0601010205

Table A4-9. Individual ARAP Permits Issued January 1994 Through June 2002 in the Group 2 Portion of the Tennessee Portion of the South Fork Holston River Watershed.